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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,632	09/22/1999	RANDALL L. SCHLESINGER	1999P82176US	4918

7590 07/19/2006

Siemens Corporation
Intellectual Property Department
186 Wood Avenue South
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EXAMINER

WILLIAMS, CATHERINE SERKE

ART UNIT PAPER NUMBER

3763

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/401,632

Applicant(s)

SCHLESINGER ET AL.

Examiner

Catherine S. Williams

Art Unit

3763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 15-17, 19, 20, 22-26, 28-36, 44 and 48-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-17, 19, 20, 22, 23, 44 and 48-50 is/are allowed.
- 6) ☒ Claim(s) 1-9, 24, 26, 28-36 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

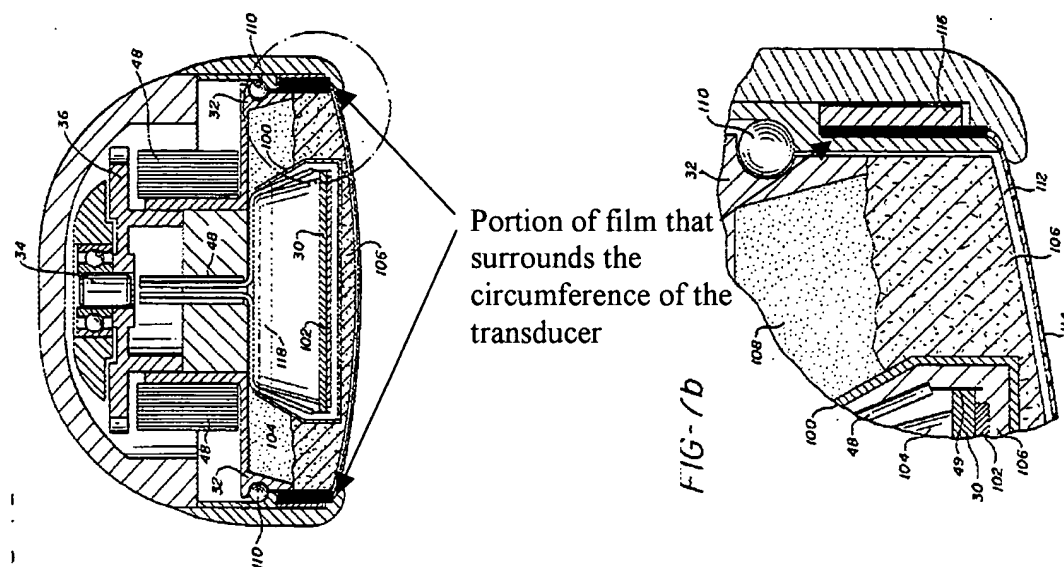
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruner (US Pat# 5,634,466).

Gruner discloses a medical diagnostic ultrasound catheter including a shaft (see fig 1), an ultrasound transducer (30), a lens (106), and a dielectric solid film (114). See figures 7a-7b. The film is positioned between the window and the ultrasound transducer. The film comprises a thin tape-like material of Mylar sheet. As shown in figure 7b, the film 114 is adjacent an emitting surface of the transducer and wraps around a portion of the circumference and at least one end of the transducer.

As shown in figures 7a and 7b, the dielectric film (114) covers the entirety of the emitting surface of the transducer. As more clearly shown in figure 7b, the film (114) extends beyond the emitting surface and is bent to extend around the peripheral circumference of the transducer. It is this bent portion that reads on "surrounds a circumference". The figures are reproduced below and the film portion that surrounds a circumference has been highlighted.

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Gruner meets the claim limitations as described above but fails to include the thickness of the film.

At the time of the invention, it would have been obvious by one skilled in the art to make the Mylar film of Gruner less than 7 microns. Applicant has failed to state why the particular thickness as opposed to other thicknesses of thin films solves a stated problem, is used for a particular purpose or provides an advantage. One of ordinary skill in the art, furthermore, would have expected the film of either the thickness disclosed by Gruner or a thickness less than microns to perform equally well since both sizes are generally thin and both would provide the insulation desired.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Connor et al (USPN 5,398,689) in view of Trotta (USPN 6,325,790). Connor discloses a probe that includes a conductor (26), a shaft (14), a braid (86), a tip (12) and an ultrasound transducer (27) within the

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tip portion. The braid is only in the shaft portion and not in the tip. See 4:55+. The braid is embedded within the shaft. See figure 2.

Connor meets the claim limitations as described above but fails to include the braid being made from a non-conductive material.

However, Trotta discloses a catheter that includes a braid made from nylon. See 7:35+. The braid provides sufficient torqueability without detrimentally hindering flexibility.

At the time of the invention, it would have been obvious to one skilled in the art to substitute the metallic braid of Connor with the nylon braid of Trotta. Both device are analogous in the art and with the instant invention; therefore, a combination is proper. Additionally, the motivation is provide by Trotta in that the polymer braid provides sufficient torqueability without detrimentally hindering flexibility.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Connor in view of Trotta. Connor in view of Trotta meet the claim limitations as described above but fail to include a braid made from LCP.

At the time of the invention, it would have been obvious to make the braid of Connor in view of Trotta from LCP. Applicant has failed to described how LCP is provided for a specific purpose, solves a stated problem or provides an advantage over other polymer materials. Additionally, one skilled in the art would have expected LCP or nylon to perform equally well considering both polymers would provide flexibility and torqability.

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Claims 9,28-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Connor in view of Trotta in further view of Gruner or Gruner in further view of Connor in view of Trotta. Gruner and Connor in view of Trotta each meet the claim limitations as described above but Gruner fails to teach the shaft with the polymer and Trotta fails to teach the transducer with the film.

However, at the time of the invention, it would have been obvious to one skilled in the art to combine Gruner with Connor in view of Trotta or Connor in view of Trotta with Gruner. The devices are all analogous with the instant invention; therefore, a combination is proper. Connor in view of Trotta provides an enhanced way to move and position the transducer of Gruner.

Allowable Subject Matter

Claims 15-17,19-20,22-23,44 and 48-50 are allowed.

Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-9,23-24,26 and 28-36 have been considered but are moot in view of the new ground(s) of rejection.

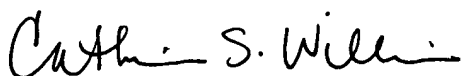
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine S. Williams whose telephone number is 571-272-4970. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas D. Lucchesi can be reached on 571-272-4977. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2192.



Catherine S. Williams
July 11, 2006

CATHERINE S. WILLIAMS
PRIMARY EXAMINER